U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Gulfco Marine Maintenance - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: **POLREP #2**
Final
Gulfco Marine Maintenance
06JZ
Freeport, TX
Latitude: 28.9662090 Longitude: -95.2894878

To: Debbie Dietrich, Office of Emergency Management
Ragan Broyles, Superfund Division
Jeff Lewellin, TCEQ

From: Gary Miller, RPM
Date: 3/9/2011
Reporting Period:

1. Introduction

1.1 Background

Site Number:	06JZ	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	9/13/2010
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	PRP	**Incident Category:**	Removal Action
NPL Status:	NPL	**Operable Unit:**	
Mobilization Date:	11/15/2010	**Start Date:**	10/26/2010
Demob Date:	1/27/2010	**Completion Date:**	3/25/2011
CERCLIS ID:	TXD055144539	**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Time-critical removal action.

1.1.2 Site Description

The Gulfco Marine Maintenance Site is approximately 40 acres in size. Gulfco operated as a barge cleaning and waste disposal facility from 1971 through 1999. Operations at the facility involved the cleaning, servicing and repair of various

types of barges. Chemicals were drained and pumped from barges into Aboveground Storage Tanks (ASTs). Barges were then washed with water and/or a detergent solution. Generated wash waters were disposed of in barges and/or ASTs onsite.

Marlin Avenue divides the Site into two areas. The property to the north of Marlin Avenue (the North Area) includes closed surface impoundments. An AST farm is located at the Site south of Marlin Avenue. It consists of fourteen tanks of various sizes located within a concrete bermed area. The tanks contain water, various organic phases, oily sludges, and sand, rust solids, and debris. Sampling of AST contents has indentified various hazardous substances including benzene, 1,2-dichloroethane, chloroform, heptachlor, tetrachloroethene, trichloroethene, and vinyl chloride.

The Gulfco site was proposed for placement on the National Priorities List (NPL) on September 5, 2002 and subsequently placed on the NPL on April 30, 2003.

1.1.2.1 Location

The facility is located at 906 Marlin Avenue (also referred to as County Road 756) approximately three miles northeast of the city of Freeport, in Brazoria County, Texas. The geographic coordinates are latitude 28° 58' 00.65" north and longitude 95° 17' 22.76" west. The Site is within the 100-year coastal flood plain along the north bank of the Intercoastal Waterway between Oyster Creek to the east and the Old Brazos River Channel and the Dow Barge Canal to the west. The southern part of the Site drains to the south and enters the Intercoastal Waterway. Approximately 78 people live within the one square mile area surrounding the Site. Approximately 3,392 people live within 50 square miles of the Site. The surrounding area is primarily industrial and commercial. A residential area is located approximately 300 feet west of the Site.

1.1.2.2 Description of Threat

The tanks contain hazardous substances including benzene, chloroform, 1,2 dichloroethane, trichloroethylene, tetrachloroethylene, and vinyl chloride in various concentrations. These are listed as hazardous substances pursuant to 40 CFR § 302.4. The predominant threat to human populations is the potential for exposure by direct contact with hazardous waste at the Site. Potentially, a wide array of adverse human health effects could occur through the inhalation, ingestion, or dermal contact with chemicals onsite. Effects include minor to severe irritation of skin, mucous membrane, lung, and gastrointestinal tract; neurological effects; death from systemic effects and asphyxiation; blood effects; and cancer.

The southern part of the Site drains to the south and enters the Intercoastal Waterway. The Site is within the 100-year coastal flood plain along the north bank of the Intercoastal Waterway. Sensitive ecosystems including wetlands receiving drainage from the site could be impacted by the toxic contaminants identified onsite. The area receives an average of 51 inches of rain annually. The contaminants are subject to migration by entrainment, windblown deposition and surface runoff. Located on the coast of Texas, the Site is subject to tropical depressions and hurricanes. In 2008, the Site received heavy rain and winds from Hurricane Ike.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On March 9, 2010, an EPA inspection identified time critical conditions at the site. One of the fifteen tanks previously documented at the site had been washed away by Hurricane Ike. Corrosion on some of the remaining tanks was resulting in complete penetration of the metal. Contents of some of these tanks have previously been documented as hazardous substances, including benzene, 1,2 dichloroethane, chloroform, heptachlor, tetrachloroethene, trichloroethene, and vinyl chloride.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

The Respondents mobilized contractors to the site on 11/15/2010. The Removal Action included characterization and either discharge or disposal of water accumulated in the tank farm containment area, removal and disposal of liquid wastes from the tanks, and solidification, removal, and disposal of solids and sludge wastes from the tanks. Following waste removal and decontamination, the tanks were demolished and removed for disposal. Piping, metal catwalks, and a steel hopper-like structure located within the North Containment Area were demolished and removed. The North and South containment areas were decontaminated and the concrete containment berms were breached so that rainfall will drain from the structures.

In November 2010 approximately 28,500 gallons of water from the containment areas was discharged to the Intracoastal Waterway after sampling confirmed that the water met the discharge criteria. In December 2011, following a rain event, another 17,000 gallons of water was discharged to the Intracoastal Waterway after sampling showed the water met the discharge criteria. An additional 6,800 gallons from the North Containment Area did not meet the discharge criteria and was hauled for disposal at Clean Harbors in Deer Park, Texas.

Removal of the liquid wastes from the tanks began on November 17, 2010, and was completed on January 6, 2011. Fluids from the tanks were pumped into tanker trucks and hauled to Clean Harbors located in Deer Park, Texas for disposal. One tanker load with non-hazardous water was shipped to the Waste Management Coastal Plains facility in Alvin, Texas.

Following removal of the liquids from the tanks, hydraulic shears and cutting torches were used to open the tanks to allow for solidification of the remaining sludge. A total of approximately 210,000 pounds of fly ash was required for solidification to the point that there were no free liquids in the waste material. The solidified sludge was removed from the tanks with a track hoe and placed in water tight roll-off boxes lined with sealable water tight liners. The roll-off boxes were transported to Clean Harbors for disposal. A total of approximately 829,364 pounds of hazardous solids were disposed of by incineration at the Clean harbors facility.

After the sludge was removed, the tanks were cleaned by scraping, brushing, steam-cleaning, and when necessary spraying and brushing with surfactants to remove any remaining oily residue. The tanks were then cut with either a cutting torch or hydraulic shears and crushed with the track hoe. All tanks were demolished on-site except Tank #14, which had walls that were greater than 1 inch thick. After cutting holes in Tank #14 to render it unuseable, it was transported off-site in two pieces. All tanks were transported to Proler Recycling in Houston Texas and added to their steel recyling.

Following removal of the tanks, the South Containment area was cleaned and decontaminated in January 2011 by removing debris, scraping sediment from the floor, and pressure washing the concrete walls and floor. The North Containment area floor was constructed of 4 to 6 inches of caliche over the clay soil. After the tanks were removed the base material under several tanks was found to be visibly stained. Tank #6 was found to have 7 holes in its base. The floor of the containment area was

scraped with a small front end loader, and sampling of this scraped caliche material determined that it was hazardous. Excavation of the visibly contaminated soil was then completed in January 2011 to varous depths up to 5.5 feet, and the excavated area was sampled.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

This removal is being performed by the Respondents pursuant to an Administrative Order on Consent (AOC) dated 10/26/2010 (CERCLA Docket No. 06-13-10). The AOC addresses the removal of the Gulfco ASTs; the Respondents are as follows: Dow Chemical Company; Chromalloy American Corporation; and LDL Coastal, L.P.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

The sludge/solids in the tanks will be stabilized with fly ash and sent off-site for disposal. Hydraulic shears will be mobilized to the site to demolish the tanks for off-site disposal after decontamination. Finally, the concrete berm containment area will be decontaminated and breached to prevent future future water accumulation within the area.

2.2.1.2 Next Steps

A newspaper notice will be placed regarding the removal action as well as completing a mail-out of informational post cards to the site mailing list. A public comment period will be held in approximately January 2011 regarding this removal.

2.2.2 Issues

2.3 Logistics Section
2.4 Finance Section
2.5 Safety Officer
2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator

June Hoey

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

The Texas Commission on Environmental Quality is an assisting agency.

4. Personnel On Site

Personnel on-site during the removal action include the RAC contractors as needed.

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

6.2 Reporting Schedule

7. Situational Reference Materials